

Remarks

Claims 1 and 3-11 are pending.

Claims 1, 7 and 9-11 are amended.

Claim 8 is original.

Claims 3-6 are as previously presented.

Claim 1 is amended to delete the word "cosmetic" from the end of line 3, insert the phrase "preparing a water soluble ammonium salt containing ester from the ester from step a by" at the beginning of step b, insert the limitations "wherein the diamine containing at least one tertiary amino group is of general formula $R_1R_2N-A-NR_3R_4$... or pyridine substituted by one or more halogens, cyano groups, alkyl groups or alkoxy groups," at the end of step b and to make minor adjustments in punctuation etc in line 3.

Support for the limitations inserted at the end of step b is found in claims 7 and 9 and on page 3 lines 8-10 of the specification.

Support for the phrase inserted at the beginning of step b is not word for word antecedence but is found in the specification on page 2 lines 7-8 and the reaction schemes found thereon. The text of page 2 provides that a "water-soluble ammonium salt is prepared" from the halogen substituted ester, i.e., the ester from step a, and certain amines. The language and structures found in the reaction schemes on page 2 make clear that the "water-soluble ammonium salt" is a reaction product of the amine and the previously prepared halo-ester, which product contains both the ester component and the ammonium salt, hence, "water-soluble ammonium salt containing ester". This amendment is added to clarify the process and reaction products of claim 1 in response to the Examiner's comments at the bottom of page 2 of the present Action and Applicants kindly ask that this amendment be entered.

Claims 7 and 9 are amended to insert the phrase "diamine containing at least one tertiary amino group or a heterocyclic aromatic amine is an" immediately following "wherein the" in line 1. Claim 7 is further amended to delete the material which follows "amino group" in line 3. Claim 9 is likewise further amended to delete the material which follows "heterocyclic aromatic amine" in line 2. Applicants note the deleted limitations are repetitive as they are found in the parent.

Claim 10 is amended to be dependent on claim 9.

Claim 11 is amended to incorporate the limitations as found in instantly amended claim 1; the term "ammonium salt containing ester" is inserted into line 1 immediately prior to "reaction product", "cosmetic" is deleted from line 5 and the limitations "wherein the diamine containing at least one tertiary amino group ... or pyridine substituted by one or more halogens, cyano groups, alkyl groups or alkoxy groups" is inserted at the end of the claim. Support is as stated for claim 1.

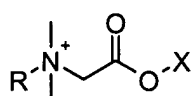
No new matter is added.

Rejections

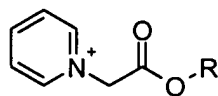
Claims 1-6 and 9-11 are rejected under 35 USC 102(b) as being anticipated by Struillou, EP 0752465 which discloses a method for the controlled release of alcohols, including biologically active alcohols, from betaine esters.

Applicants respectfully traverse the rejections.

Regarding the heterocyclic aromatic amine, Applicants note that page 6, lines 20-33 of Struillou disclose a compound of general formula 2 of the structure



wherein X is an odiferous alcohol and R may be pyridyl. Applicants note that in the instantly amended claims, the heterocyclic amines reacted with the halo ester are not substituted by any amino groups and therefore the bond between the ester portion and the heterocyclic amine is at the heterocyclic nitrogen as in the following structure:



Such a structure is not prepared in Struillou. Applicants respectfully note that while pyridine is used as a base in preparing the ester linkage, only 1 equivalent of pyridine is used and the product is the halo ester similar to that produced in instant step a, which halo ester according to Struillou is reacted with another amine to form a salt, but not the amines of the instant invention.

Applicants further respectfully point out that the instant invention is to a process which uses the instant salts in controlled release of biologically active components and not to compounds per se. While the Examiner may be correct in stating that some pyridyl salt may be formed in the ester forming reaction of Struillou, Struillou does not use or suggest the method where a pyridyl salt is used in the release of a biologically active compound. The instant process requires the further step wherein the halo ester of step a is reacted with an amine which could be pyridine. Struillou does not react the halo ester with heterocyclic amines.

Regarding the **diamine** containing at least one tertiary amino group of step b in claim 1 Applicants respectfully point out that the instantly amended claims require that the diamine be of formula $R_1R_2N-A-NR_3R_4$ wherein R_1 and R_2 are independently C_1-C_7 alkyl, R_3 and R_4 are independently H or C_1-C_7 alkyl and A is a C_1-C_7 linear or branched alkyl chain. Struillou does not disclose the instant diamines or exemplify any reaction between a diamine and the halo ester.

Applicants therefore respectfully submit that Struillou does not disclose a process wherein a halo ester is reacted with a diamine or a heterocyclic aromatic amine as in the instant invention. Applicants therefore respectfully submit that the 102(b) rejections over Struillou of claims 1, 3-6 and 9-11 are addressed and are overcome and kindly ask that the rejections be withdrawn.

Claims 1, 4-8 and 11 are rejected under 35 USC 103(a) as being anticipated by Koller, US 4,083,847 in view of Shibata, et al., US 5,958,084.

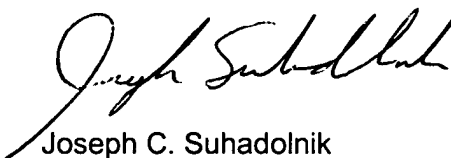
Applicants respectfully traverse the rejections.

The instantly amended claims exclude cosmetics and therefore dyes. Both Koller and Shibata are silent regarding the biologically active compounds of the instant invention. Applicants respectfully maintain that in light of the amendments above the combined art does not meet the limitations of the instantly claimed process for controlled release of a biologically active hydroxyl group containing substances.

Applicants therefore respectfully submit that the 103(a) rejections over Koller in view of Shibata, et al., US 5,958,084 are addressed and are overcome and kindly ask that the rejections be withdrawn.

Applicants respectfully submit all objections and rejections are addressed and are overcome and kindly ask that they be withdrawn and that claims 1 and 3-11 be found allowable. In the event that minor amendments will further prosecution, Applicants request that the examiner contact the undersigned representative.

Respectfully submitted,



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